

AMENDMENTS TO THE CLAIMS

1. (Original) A method for detecting an object, comprising:
emitting a light pulse;
receiving a reflection of said light pulse;
indicating a presence of the object from said received light pulse; and,
adjusting sensitivity of said indicating step based on an elapsed time from
said emission.
2. (Currently Amended) The method of claim 1 wherein said adjusting step
| comprises increasing said sensitivity as said elapsed time from said emission
increases.
- 3-4 (Cancelled).
5. (Original) The method of claim 1 wherein sensitivity has a first sensitivity
value at a first elapsed time and a second sensitivity value at a second elapsed time
after said first elapsed time, said second sensitivity being greater than said first
sensitivity.
6. (Original) The method of claim 1 wherein said emitting step includes:
transmitting said light pulse to a polymeric light reflector; and,
reflecting said light pulse outwardly from said light reflector.
- 7-10 (Cancelled).
11. (Original) A method for detecting an object, comprising:
emitting a plurality of light pulses;
receiving a reflection of said light pulses;
indicating a presence of the object from said received light pulses; and,
adjusting sensitivity of said indicating step based on a travel time of said
pulses.
12. (Cancelled).

13. (Original) A system for detecting an object, comprising:
a light source generating a light pulse, said light pulse being emitted;
a light detector configured to receive a reflection of said pulse; and,
a controller operably connected to said light source and said detector, said controller configured to indicate a presence of the object from said received light pulse, said controller further configured to adjust sensitivity for detecting the object based on an elapsed time from said emission.

14. (Cancelled).

15. (Original) The system of claim 13 wherein said light source comprises a near infrared diode laser.

16. (Original) The system of claim 13 wherein said light detector comprises a near infrared light detector.

17. (Original) The system of claim 13 wherein said sensitivity is adjusted to have a first sensitivity value at a first elapsed time and a second sensitivity value at a second elapsed time after said first elapsed time, said second sensitivity being greater than said first sensitivity.

18. (Previously Presented) An article of manufacture, comprising:
a computer storage medium having a computer program encoded therein for detecting an object, said computer storage medium comprising:
code for inducing a light transmitter to emit a light pulse;
code for storing values indicative of a reflection of said light pulse;
code for indicating a presence of the object from said stored values; and,
code for adjusting sensitivity for detecting the object based on elapsed time from said emission.

19. (Previously Presented) A method for detecting an object, the method comprising:
emitting a light pulse;
receiving a reflection of the light pulse; and

indicating presence of the object when a power level of the received light pulse exceeds a signal threshold that decreases based on elapsed time from the emission.

20. (Previously Presented) A method for detecting an object, the method comprising:

emitting a light pulse;

receiving a reflection of the light pulse;

indicating presence of the object when a power level of the received light pulse multiplied by a signal gain that increases with elapsed time from emission is greater than a detection threshold.

21. (New) The method of claim 1 wherein the step of adjusting sensitivity comprises:

adjusting a signal from the received light pulse using a signal gain that increases with elapsed time from emission.

22. (New) The method of claim 1 wherein the step of adjusting sensitivity comprises:

decreasing a detection threshold in a stepwise manner based on the elapsed time from the emission.

23. (New) The method of claim 11 wherein the step of adjusting sensitivity comprises:

applying a signal gain that increases with elapsed travel time to the signal from the received light pulse.

24. (New) The method of claim 1 further comprising:

storing values corresponding to a first plurality of received light pulses during a first monitoring period;

storing values corresponding to a second plurality of received light pulses during a second monitoring period;

aligning stored values from the first and second monitoring periods;

averaging the aligned values to produce an average waveform; and

comparing the average waveform to a threshold to indicate presence of the object.

25. (New) The method of claim 24 wherein the average waveform is compared to a threshold that decreases based on elapsed time from said emission.

26. (New) The method of claim 24 wherein the average waveform is adjusted by a gain that increases based on elapsed time from said emission.